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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/704,916	11/02/2000	William Brewster Robinson	99-969	4616
32127	7590	02/26/2004	EXAMINER	
VERIZON CORPORATE SERVICES GROUP INC. C/O CHRISTIAN R. ANDERSEN 600 HIDDEN RIDGE DRIVE MAILCODE HQEO3H14 IRVING, TX 75038			HECK, MICHAEL C	
			ART UNIT	PAPER NUMBER
			3623	

DATE MAILED: 02/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/704,916

Applicant(s)

ROBINSON ET AL.

Examiner

Michael Heck

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 November 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-70 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-70 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 November 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. The following is a First Office Action in response to the application filed 02 November 2000. Claims 1-70 are pending in this application and have been examined on the merits as discussed below.

Drawings

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "58" has been used to designate both the submit button "continue" on figure 4 and the title "Worklist View -- User BEN" on figure 5.

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: "72" and "222".

4. The drawings are objected to under 37 CFR 1.83(a) because they fail to show "192" as described in the specification on page 28, line 27. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d).

5. The drawings are objected to because:

- On Figure 3, item 44-15, Activity UI, is designated predominately throughout the disclosure as 44, therefore, change 44-15 to 44.
- On Figure 3, delete, "Process Instance Creation UI", and insert -- Process Instance *Activity* UI --.
- On Figure 3, delete "42-9,-10,-11,-12", and insert -- 42-9,-10,-11,-12,-13 --.
- On figure 3, cannot read contents of center box.

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- On Figure 20, delete, "Process Instance Creation UI", and insert -- Process Instance Activity UI --.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

6. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The abstract exceeds 150 words.

7. The disclosure is objected to because of the following informalities:

- On page 14, line 31, and page 15, line 12-13, delete "Figures 4-14", and insert -- Figures 4-16 --.
- On page 15, line 27, delete "text boxes 54", and insert -- text boxes 55 --.
- On page 15, line 32, and page 16, lines 22 and 24, item 58 describes both the submit button and title. See Drawing objection.
- On page 16, line 31, delete "control page 42-6", and insert -- control page 42-16 --.

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- On page 19, line 15, delete “page 44-15 in figure 15”, and insert -- page 44 in figure 15 --.
 - On page 24, line 10, delete “row data entry 140”, and insert -- row data entry 141 --.
 - On page 28, lines 12 and 19, delete “pages 44” and insert -- *user interface* pages 44 --.
 - On page 30, line 1, delete “-11, -12)”, and insert -- -11, -12, -13) --.
 - On page 33, line 4, delete “42-12”, and insert -- 42-13 --.
 - On Page 38, line 35, and Page 39, lines 4-5, 8-9, 11, and 14-15, delete, “Process Instance Creation UI”, and insert -- Process Instance *Activity* UI --.
8. Claims 40 and 56 are objected to because of the following informalities: Delete “redirecting the user form”, and insert -- redirecting the user from --.
9. The above citation is a mere guide. Applicant is requested to review the specification thoroughly to eliminate additional errors. Appropriate correction is required.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. **Claims 1-70** are rejected under 35 U.S.C. 103(a) as being unpatentable over (U.S. Patent 6,397,191) in view of Brandt et al. (U.S. Patent 5,892,905). Notani et al. disclose a flexible web-based interface for workflow management systems comprising:

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- **[Claim 31]** pointing at least one first workflow platform-dependent object to access the workflow functionality (Col. 2, lines 25-39, Notani et al. teach a computer implemented process for enterprise collaboration that involves instantiating an object-oriented workflow where the object-oriented workflow comprises objects associated with activities to be performed within the workflow.);
- calling at least one server program with the at least one control page which thereby invokes at least one of the first workflow platform-dependent object and the at least one second workflow platform-independent object, wherein, when the functionality of the workflow management system is to be accessed via the set of predefined protocol user interface pages, the at least one control page calls the at least one server program which, in turn, invokes at least one of the first and second objects to promote data translation and exchange between the client program and the workflow management system (Col. 2, lines 25-39, Notani et al. teach that after deployment, the deployed objects are executed to provide multi-enterprise collaboration with the activities communicating data using objects that carry both data and behavior);

Notani et al does not teach configuring a set of predefined protocol user interface pages comprising at least one control page with said predefined protocol having at least one server-side script embedded therein, and interfacing at least one second workflow platform-independent object with the at least one first workflow platform dependent object. Brandt et al. teach an interface component mechanism uses HTML variables and templates. The HTML templates include input variables that are used to pass data between the web browser and the software application. The input data comprises an URL or other address data that specifies the location of an HTML template (Col. 14, lines 43-60, and Col. 15, lines 64-66). It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention it use the predefined user interface pages of Brandt et al. with the teachings of Notani et al. since Notani et al. teach local implementation of in-memory object models that can be accessed by activities during execution (Col. 2, lines 57-60). The success or failure of an enterprise depends to a large extent on the quality of the decision making within the enterprise. The domain or the "extent of the world" used to make the decision leads to more optimal decision. Having access to different application

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programs via the World Wide Web through a common user interface expands the domain of the decision making process. Therefore, since the "extent of the world" is increased, the decisions made will be optimal.

- **[Claim 32]** the step of logging a user on to the workflow management system via one of the set of predefined protocol pages, receiving a user identification variable and a password variable therefrom, and invoking at least one of the first and second objects to authenticate the user identification variable with the workflow management system (Brandt et al.: Col. 8, lines 30-39, Brandt et al. teach that web security uses a password and userID combination to authenticate a particular web user to access a particular web server or specific resource through the web server).
- **[Claim 33]** the step of receiving a work item identification and a target user interface address from the at least one control page; and invoking at least one of the first and second objects to record lock a task in the workflow management system corresponding to the work item identification (Brandt et al.: Col. 16, line 49 to Col. 17, line 25, Brandt et al. teach an identifier is created to identify the specific communication between the user and the software application. The identifier is attached to all information transmitted between the user and the software application. A conversation is commenced by invoking an OPEN application program interface (API) and terminated by invoking a CLOSE API. Once the user has accessed the software application, the software application will continue to process the user's request to completion or until further input is needed from the web client. The examiner interprets the software application's processing of the user's request to completion as "record lock").
- **[Claim 34]** the step of issuing a redirection command to a predefined protocol page represented by the target user interface address for performing work on the task identified by the work item identification (Brandt et al.: Col. 15, lines 25-44, Brandt et al. teach the supplied HTML templates include on or more variables. The values for the variables are requested from the associated software application. The software application either receives the data corresponding to the variable or initiates software processes to generate the appropriate data.).
- **[Claim 35]** the step of receiving a work item identification from the at least one control page and invoking at least one of the first and second objects to release a record lock on a task in the workflow management system corresponding to the work item identification and terminate any exclusive access by a user to the task identified by the work item identification (Brandt et al.: Col. 16, line 49 to Col. 17, line 25, Brandt et al. teach an identifier is created to identify the specific communication between the user and the software application. The identifier is attached to all information transmitted between the user and the software application. A

- conversation is commenced by invoking an OPEN application program interface (API) and terminated by invoking a CLOSE API. Once the user has accessed the software application, the software application will continue to process the user's request to completion or until further input is needed from the web client.).
- **[Claim 36]** the step of receiving task-specific data from a requesting page and updating the task identified by the work item identification with the task-specific data in the workflow management system (Notani et al.: Col. 2, lines 40-51, Notani et al. teach the process for data access and transformation for an object-oriented workflow includes supporting communication of objects and derived format objects built from native format objects. The process involves communicating information between activities of an executing workflow using objects and derived format objects. The examiner interprets activities as tasks.).
 - **[Claim 37]** the step of a receiving predefined process template identification from the at least one control page, and invoking at least one of the first and second objects to initiate a new instance of a process template in the workflow management system corresponding to the process template identification (Brandt et al.: Col. 16, lines 7-15, Brandt et al. teach an input variable can be included in an HTML page that specifies the next HTML page to be sent to the web browser).
 - **[Claim 38]** the step of determining whether input data is needed to initiate the new instance of the predefined process template (Brandt et al.: Col. 16, lines 7-23, Brandt et al. teach an input variables are inserted into HTML pages to provide input from web browsers to the Internet/application gateway and software applications. The Internet/application gateway can be configured to pass a particular variable from one HTML screen to the next HTML screen. The examiner interprets to process to include a determination since a particular variable is to be identified.).
 - **[Claim 39]** the step of redirecting the user to a user interface page to receive required input data to properly initiate the new instance of the process template with the input data if the determining step results in a determination that data is needed to initiate the process instance (Brandt et al.: Col. 16, lines 7-46, Brandt et al. teach an input variables are inserted into HTML pages to provide input from web browsers to the Internet/application gateway and software applications. The Internet/application gateway can be configured to pass a particular variable from one HTML screen to the next HTML screen. The examiner interprets to process to include a determination since a particular variable is to be identified. User-defined variables can be added to HTML templates by system operators to provide specialized inputs and outputs as needed for different types of software applications.).
 - **[Claim 40]** the step of redirecting the user [from] the user interface page back to the New Instance servlet to update the workflow management system with the received input data to initiate the process instance (Brandt et al.: Col. 15, lines 25-44, and Col.

- 16, lines 7-46, Brandt et al. teach software applications receive data corresponding to the variables or initiate software processes to generate the appropriate data. Input variables are inserted into HTML pages to provide input from web browsers to the Internet/application gateway and software applications. The Internet/application gateway can be configured to pass a particular variable from one HTML screen to the next HTML screen.).
- **[Claim 41]** at least one predefined protocol user interface page adapted to receive at least one data variable from the user and to call the at least one server-based applet (Brandt et al.: Col. 15, lines 64-66, Brandt et al. teach the HTML templates include input variables that are used to pass data between the web browser and the software application).
 - **[Claim 42]** the user interface page further comprises at least one <FORM> tag having at least one input element for receiving data from the user (Brandt et al.: figure 11-22, Brandt et al. teach <FORM ACTION> is used.)
 - **[Claim 43]** the user interface page is adapted to provide at least one data variable to initiate a process template into a running process that requires the data entry for instantiation (Brandt et al.: figure 11-22, and Col. 23, lines 5-41, Brandt et al. teach an INPUT TYPE is needed, such as compact, mid size, full size or luxury for the rental reservation example. An activity program receives car rental information, locates the next reservation number, saves the reservation number to a file, returns the reservation number to the requester and sets the reservation number in the output data container.).
 - **[Claim 44]** the user interface page is adapted to provide at least one data variable to complete a task from a previously initiated process that requires the data entry for completion (Brandt et al.: figure 11-22, and Col. 23, lines 5-41, Brandt et al. teach an activity program receives car rental information, locates the next reservation number, saves the reservation number to a file, returns the reservation number to the requester and sets the reservation number in the output data container. Figure 11 data input is used for figure 13 and figure 14.).
 - **[Claim 45]** the first and second objects are Java classes (Brandt et al.: Col. 6, lines 4-12, Brandt et al. teach other types of data besides HTML may be used to be transmitted to a web browser including Java applets (executable code)).
 - **[Claim 46]** the Java class comprises a Java interface class classes (Brandt et al.: Col. 6, lines 4-12, Brandt et al. teach other types of data besides HTML may be used to be transmitted to a web browser including Java applets (executable code)).
 - **[Claim 47]** the at least one control page comprises a page selected from a group consisting of a worklist page, a process instance page, a process template page, a

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work item control page, a filter control page, and a notifications page (Brandt et al.: Col. 28, lines 9-56, Brandt et al. teach the process will send a reservation confirmation HTML screen to the web client at the clients workstation. Figure 13 shows the HTML code for the reservation confirmation template. The examiner interprets the reservation confirmation template to be the notification page.).

- **[Claim 48]** the client program is a web browser and the client server is a web server (Brandt et al.: Col. 5, lines 52-54, and Col. 6, lines 3-5, Brandt et al. teach the web browser is a software program running on the clients workstation and the client workstation and web server computer system are the same physical and/or logical computer system.).
- **[Claim 65]** creating at least one predefined protocol process activity page relating to a process and named for the unique process identifier (Brandt et al.: Col. 7, lines 1-40, Brandt et al. teach when a web server application that is running on a web server computer receives a web page request from a web browser, it will build a web page in HTML or retrieve a file containing a pre-built web page and send it across a connection to the requesting browser. Some web pages are designed to elicit input from a web browser. The examiner interprets the web page that is requested to have a unique process identifier.);
- locating the at least one predefined protocol process activity page in the predefined interface root directory path (Brandt et al.: Col. 23, lines 42-57, Brandt et al. teach the person or user who wants to rent a car will access the WWW by using a client workstation that is running a web browser and will enter the URL for the rental car agency and locate the home page site for the rental car agency);
- creating a process directory beneath the predefined interface root directory path for the process and named for the unique identifier thereof (Brandt et al.: Col. 26, lines 49-56, Brandt et al. teach that when the car rental reservation process model was initially built, the first activity program was identified and designated to run automatically whenever the car reservation process model was invoked. There will be multiple related activity programs that will work together to process the car rental request. Each individual activity program is a separate software module that is designated to accomplish a specific task or return some requested information.);
- creating at least one predefined protocol user interface page within the created process directory in a predetermined protocol relating to a task assignable within the process named for the task unique identifier if the process requires input on any of its assignable activities (Brandt et al.: Col. 23, lines 42-57, Brandt et al. teach the person or user who wants to rent a car will access the WWW by using a client workstation that is running a web browser and will enter the URL for the rental car agency and locate the home page site for the rental car agency);

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- locating the at least one predefined protocol user interface page in the created directory within the predefined interface root directory path (Brandt et al.: Col. 25, lines 21-33, and Col. 26, lines 49-56, Brandt et al. teach that by using HTML templates with substitution variables, a single relatively simple GCI module in conjunction with an FMIG can provide an effective interface between a web server and a plurality of software applications. This allows system operators to provide easily customizable web access to a plurality of software applications over the WWW. When the car rental reservation process model was initially built, the first activity program was identified and designated to run automatically whenever the car reservation process model was invoked. There will be multiple related activity programs that will work together to process the car rental request. Each individual activity program is a separate software module that is designated to accomplish a specific task or return some requested information.); and
- whereby the predefined protocol process activity page can be automatically located by the interface within the predefined interface root directory path of the client server by only knowing the process unique identifier and the at least one predefined protocol user interface page can be located in the created directory within the predefined interface root directory path by knowing only the task unique identifier (Brandt et al.: Col. 26, lines 49-56, Brandt et al. teach that when the car rental reservation process model was initially built, the first activity program was identified and designated to run automatically whenever the car reservation process model was invoked. There will be multiple related activity programs that will work together to process the car rental request. Each individual activity program is a separate software module that is designated to accomplish a specific task or return some requested information.).
- **[Claim 66]** the step of embedding a form within the at least one user interface page in the predefined protocol configured so as to provide any required data to the assignable task into the workflow management system (Brandt et al.: Col. 25, lines 21-33, and Col. 26, lines 49-56, Brandt et al. teach that by using HTML templates with substitution variables, a single relatively simple GCI module in conjunction with an FMIG can provide an effective interface between a web server and a plurality of software applications. This allows system operators to provide easily customizable web access to a plurality of software applications over the WWW. When the car rental reservation process model was initially built, the first activity program was identified and designated to run automatically whenever the car reservation process model was invoked. There will be multiple related activity programs that will work together to process the car rental request. Each individual activity program is a separate software module that is designated to accomplish a specific task or return some requested information.).
- **[Claim 67]** the form contains input prompts configured so as to provide specific data in a machine readable format to the workflow management system (Brandt et al.: Col. 23, line 58 to Col. 24, line 23, Brandt et al. teach the user inputs information such as

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member number, last name, car preference and submits information by clicking on the "submit" button. The web server application examines the data stream to determine what action should be taken to fulfill the user's request.).

- **[Claim 68]** the step of embedding a hidden field on the at least one user interface page containing the unique process identifier for cross-referencing the data within the at least one user interface page with the workflow management system (Brandt et al.: Col. 26, lines 1-12, Brandt et al. teach that to assure that FMIG can match up the process instance with the web browser that requested it, the FMIG generates and stores a "handle" for the web client that is some combination of the process instance name, the activity instance name, and the security data for the web client. The examiner interprets the "handle is an embedded hidden field.).
- **[Claim 69]** the predefined protocol comprises at least one of HTML and javascript (Brandt et al.: Col. 6, lines 13-21, Brandt et al. teach software programs running on a web server computer system typically output data pages of HTML data to web browsers in response to requests.).
- **[Claim 70]** the step of defining a programming object for use as an input container for delivering data entered by a user on the at least one user interface page (Brandt et al.: Col. 7, lines 23-40, Brandt et al. teach a web page may request the user's name in an HTML form and require the user to select a particular function using an HTML button).

Claims **1-13, 15-27, 29, 30, and 49-64** substantially recites the same limitations as that of claims 31-48 with the distinction of the recited method being a method and interface. Hence the same rejection for claims 31-48 as applied above applies to claims **1-13, 15-27, 29, 30, and 49-64**.

- **[Claim 14]** the first object is implemented in terms of the workflow-type functionality of the workflow management system (Notani et al.: Col 2, lines 40-51, Notani et al. teach a computer implemented process is provided for data access and transformation for an object-oriented workflow where the process includes supporting communication of objects as a primary data format and supporting derived format objects built from underlying native data formats).

Claim 28 substantially recites the same limitations as that of claim 14 with the distinction of the recited interface being an interface. Hence the same rejection for claim 14 as applied above applies to **claim 28**.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Bowman-Amuah (U.S. Patent 6,289,382) discloses a system, method and article of manufacture for delivering service via a globally addressable interface. A plurality of interfaces is provided with access allowed to a plurality of different sets of services from each of the interfaces.
- Yaung et al. (U.S. Patent 6,470,353) discloses an object-oriented framework for managing access control in a multimedia database. The client application is typically a software program such as a workflow application.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael C. Heck whose telephone number is (703) 305-8215. The examiner can normally be reached Monday thru Friday between the hours of 8:00am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq R. Hafiz can be reached on (703) 305-9643.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

Any response to this action should be mailed to:

**Commissioner of Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450**

Or faxed to:

(703) 872-9306	[Official communications; including After Final communications labeled "Box AF"]
(703) 746-9419	[Informal/Draft communication, labeled "PROPOSED" or "DRAFT"]

Hand delivered responses should be brought to Crystal Park 5, 2451 Crystal Drive, Arlington, Virginia, 7th floor receptionist.

mch
21 February 2004

**TARIQ R. HAFIZ
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600**